

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicant:

Daniel Xu et al.

Serial No.:

09/976,641

Filed:

October 12, 2001

For:

Reducing Leakage Currents In

Memories With Phase-Change

Material

Art Unit:

2815

Examiner:

B. Baumeister

Docket:

ITO.0504US

P12497

Box AF Commissioner for Patents Washington, DC 20231

REPLY TO FINAL REJECTION

Sir:

In response to the final rejection mailed April 16, 2003, please amend the abovereferenced patent application as follows:

IN THE CLAIMS

Please amend claim 11 as follows:

11 (Twice Amended). A memory cell comprising:

a substrate;

a phase-change material over said substrate;

a buried line of a first conductivity type formed in said substrate, said buried line including a more lightly doped region over a more heavily doped region and a more lightly doped region under said more heavily doped region;

a region of a second conductivity type opposite said first conductivity type over said line and under said phase-change material; and

a pair of trenches on either side of said buried line extending past said buried line and said region into said substrate under said buried line.

addressed to the Commissioner for Patents Washington DC 20231.

I hereby cartify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class with sufficient postage on the date indicated above and is